Please add the following new claims 33-34:

33. (New) The clinical chemistry system of claim 20, wherein the sample identification mechanism further comprises:

an identification information reading device for reading sample identification information from the primary tube; and

a tube spinner for holding and spinning the primary sample tube, whereby the sample identification information can be accessed and determined by the identification information reading device.

34. (New) The clinical chemistry system of claim 33, wherein the sample identification information reading device is a bar code reader.

REMARKS:

Minor changes are made to this specification. Claims 1, 20, 22, 25, and 27-32 are amended; marked up versions of the amended claims are attached hereto pursuant to 37 C.F.R. § 1.121(c)(ii). New claims 33 - 34 are added. The support for new claims 33-34 can be found on page 7, lines 18-25 and page 8, lines 1-6. No new matter is introduced. Claims 1-34 are pending in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

The drawings are objected to because the reference character "44" was used to designate both sample tube and tube identification station on page 11, lines 3-14, of the specification. In response, applicants have amended page 11 of the specification as shown above to clarify that the reference character "44" identifies a primary sample tube positioned in the tube identification station.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. The Examiner appears to believe that the specification does not support the limitation of immediate storage tube location with an associated alert mechanism for identifying when the immediate sample is loaded into the system as recited by claims 11 and 24. Applicants respectfully disagree.

The specification teaches that the clinical chemistry system of the present invention provides a predetermined number of immediate or STAT tube locations 36

for more immediate testing, which allows to bypass what may be as many as two hundred samples queued in the system (page 10, lines 22-25). The specification also teaches that the system of the present invention includes a STAT button 38 that, when manually pressed, alerts the system that there are sample tubes in STAT positions that must be accessed (page 11, lines 1-7). Therefore, the specification fully supports the limitations objected to by the Examiner.

The Examiner also objected to the specification due to inconsistencies between claim 1 and the specification. In response, applicants have amended claim 1 as suggested by the Examiner.

Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, claims 1, 20, and 27-32 are rejected due to inconsistencies between the claims and the specification, and because some terms lack proper antecedent basis. In response, applicants have amended claims 1, 20, and 27-32, as suggested by the Examiner.

Claim 22 is rejected because of the use of the term "indirectly." This rejection is moot in view of the amendment of claim 22. In order to more properly define the embodiments of the present invention, claim 22 has been amended to eliminate limitation "directly or indirectly." This limitation is believed to be unnecessary for the patentability of the claim because it is dependent on patentable claim 20. The deleted limitation is also believed to be unnecessary for the definiteness of the claim. In view of the teachings of the specification (see, for example, page 7, lines 5-11), those skilled in the art will readily recognize that the claimed controller may control the determining of sample identification information and the tube transfer station either directly or indirectly (e.g. through another computer). In light of these amendments, applicants respectfully request the withdrawal of the claim rejections under 35 U.S.C. 112, second paragraph.

Claims 20-23 and 25-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Mazza *et al.* (U.S. Patent No. 5,350,564). This rejection is respectfully traversed.

Amended independent claim 20 is directed to a clinical chemistry system comprising a carriage mechanism that grips the primary sample tube and transports it to the sample identification station. The Examiner acknowledged that the Mazza reference failed to teach or suggest the claimed carriage mechanism. Therefore, the amended claim 20 is neither anticipated nor suggested by the Mazza reference. Claims 21-23 and 25-30 depend, directly or indirectly, from patentable claim 20 and are, therefore, believed to be patentable for at least the same reasons as claim 20.

Claims 1-11, 13-19, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazza *et al.* (U.S. Patent No. 5,350,564) in view of Kodama *et al.* (U.S. Patent No. 6,117,683). This rejection is respectfully traversed.

Both independent claims 1 and 20 require a carriage mechanism that grips and transports a primary sample tube. As stated above, the Examiner acknowledged that the Mazza reference failed to teach such limitation. However, the Examiner relied on the Kodama reference for teaching the same. Applicants respectfully disagree with the Examiner's reading of the Kodama reference.

The Kodama reference has no teaching whatsoever of moving an individual primary sample tube, much less of the carriage mechanism of the present invention that grips and transports a single primary sample tube. Instead, the Kodama reference teaches a transfer mechanism for transferring sample racks 9 holding a plurality of sample vessels 76 (columns 3-4). Therefore, the Kodama reference does not teach or suggest a carriage mechanism that grips and transports a primary sample tube, as recited in claims 1 and 20.

Even if Mazza and Kodama indeed had teachings of certain limitations of the instant claims 1 and 20, it still would not have been obvious to combine the two references, because such a combination is not possible without significant modifications to the Mazza system.

Mazza describes an automatic chemical analyzer that utilizes interlocking carrier members for storing and transporting individual sample tubes (abstract and column 7, lines 19-39). The carrier members must be unlocked and loaded one-by-

one onto a rotator assembly for bar code reading (column 7, lines 40-62). In the Kodama reference, on the other hand, conventional, non-modular sample racks are used to transport a plurality of the sample tubes within the automatic analyzer. In order to combine Mazza and Kodama as suggested by the Examiner, one would have to completely redesign Mazza's analyzer, which uses modular locking/unlocking individual sample tube carriers, to accommodate tube racks of Kodama. Such a modification is not possible without destroying the function of the analyzer disclosed in Mazza. It is respectfully submitted, therefore, that it would be unobvious to combine Mazza and Kodama to arrive at the present invention.

Additionally, there is no suggestion in the cited references of modifying the analyzers disclosed therein in the direction of the present invention, nor is there any suggestion whatsoever of the desirability of such a modification. The mere fact that a reference may be modified in the direction of the claimed invention does not make the modification obvious unless the reference expressly or impliedly teaches or suggests the desirability of the modification. Thus, it is respectfully submitted that the ordinarily skilled artisan, working without the benefit of the applicant's specification, would have had no motivation to combine the features of the cited references to arrive at the present claims 1 and 20. Therefore, claims 1 and 20 are neither anticipated nor rendered obvious by the Mazza and Kodama references, either alone or in combination. Claims 1-11, 13-19, and 24 depend, directly or indirectly, from patentable claims 1 and 20 and are, therefore, believed to be patentable for at least the same reasons as claims 1 and 20.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mazza *et al.* (U.S. Patent No. 5,350,564) and Kodama *et al.* (U.S. Patent No. 6,117,683) as applied to claim 10, and further in view of Kurosaki *et al.* (U.S. Patent No. 5,587,129). This rejection is respectfully traversed.

The Kurosaki reference, cited against claim 12, does not address the deficiencies of the Mazza and Kodama references. Kurosaki is relied on for teaching a cap piercer, and it does not teach a "carriage mechanism that grips one of the plurality of primary sample tubes," as required by claim 1. Therefore, claim 1, as

well as claim 12 that depend therefrom, is patentable over the Mazza, Kodama, and Kurosaki references, either alone or in any combination.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6700 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

Date: June 26, 2001

By: _____
Wei-Ning Yang
Registration No. 38,690
Attorney for Applicant(s)

500 South Grand Avenue, Suite 1900
Los Angeles, California 90071
Phone: 213-337-6700
Fax: 213-337-6701

Version with markings to show changes made:

IN THE SPECIFICATION:

Please replace the text of the second paragraph on page 11, lines 8-19, with the following text:

Whether in accessing sample tubes from the STAT locations or from the many other sample tube locations within the illustrated four trays 32, sample tubes 34 are accessed using the gripper 40 of an overhead carriage assembly 42. The gripper 40 includes opposing arms that can be brought together to grip and lift successive sample tubes from the trays 32. Sample tubes are successively picked up from the sample trays 32 and transported to the sample tube identification station [indicated schematically illustrated as 44 in Fig. 2]. Figure 2 shows a primary sample tube 44 positioned in the sample tube identification station. Identification information is first read off of the tubes, preferably using a tube spinner and an associated bar code reader, and then aliquots are drawn from the sample tubes in accordance with the testing protocol associated with the sample identification information. After the desired number of aliquots are drawn and provided to respective ones of the reaction vessels, the sample tube is returned to the tray and a next sample tube can be accessed.

Please replace the text of claims 1, 20, 22, 25, and 27-32 with the following text:

1. (Amended) A clinical chemistry system comprising:

a storing station that receives and stores a plurality of primary sample tubes;

a sampling station including a sample probe that draws a volume of sample from a primary sample tube and transfers the volume to a secondary tube;

a carriage mechanism that grips one of the plurality of primary sample tubes and transports the primary sample tube to the sampling station and returns the primary sample tube to the storing station;

a first and a second secondary tube transfer station, respectively, for coupling to first and second analyzers, the first and second sample tube transfer stations adapted to move [a] the secondary sample tube from [the] a continuous transport mechanism to be received by a corresponding one of the first and second analyzers; and

[a] the continuous transport mechanism for moving filled secondary tubes to a selected one of the first and second secondary tube transfer stations.

20. (Amended) A clinical chemistry system comprising:

a sample identification [station] mechanism for determining sample identification information from a primary sample tube;

a transferring mechanism for transferring a volume of the sample from the primary sample tube into a secondary sample tube;

a carriage mechanism that grips the primary sample tube and transports [samples] it to the sample identification station;

a continuous transport mechanism for moving secondary sample tubes within the system;

first and second sample tube transfer stations, respectively, for coupling to first and second analyzers, the first and second sample tube transfer stations adapted to move [a] the secondary sample tube from the continuous transport mechanism to an interface of a first or second analyzer; and

a host computer, the host computer receiving sample identification information and issuing a sample testing message that includes one of the first and second analyzers as a destination.

22. (Amended) The system of claim 20, further comprising:

a controller that controls [, directly or indirectly,] the determining of sample identification information and that controls [, directly or indirectly,] the first sample tube transfer station,

wherein the controller transfers sample identification information to the first clinical chemistry analyzer in conjunction with a transfer of a secondary tube.

25. (Amended) The system of claim 20, wherein the sample identification [station] mechanism comprises a bar code reader for reading a bar code from a label of a primary sample tube.

27. (Amended) The system of claim 20, wherein a plurality of sample tube carriages are mounted to the belt, each sample tube carriage adapted for carrying [a] the secondary sample tube.

28. (Amended) The system of claim 27, wherein the sample tube carriages provide lateral access to [a] the secondary sample tube within the sample tube carriage from at least two sides of the secondary sample tube.

29. (Amended) The system of claim 27, wherein the sample tube carriages provide lateral access to [a] the secondary sample tube within the sample tube carriage from at least two opposite faces of the secondary sample tube carriage.

30. (Amended) The system of claim 27, wherein the sample tube carriages hold [a] the secondary sample tube in place with resilient clips.

31. (Amended) The system of claim 27, wherein the sample tube carriages hold [a] the secondary sample tube in place using clips that engage an upper and lower portion of a sample tube.

32. (Amended) The system of claim 31, wherein the sample tube carriages provide lateral access to [a] the secondary sample tube within the sample tube carriage from at least two opposite faces of the sample tube carriage.